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**FORM PTO-1449** 

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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ATTY. DOCKET NO. I-2-32.3US

SERIAL NO. 09/843,520

APPLICANT Donald L. Schilling

FILING DATE April 27, 2001 GROUP 2631

### **U.S. PATENT DOCUMENTS**

EXAMINER INITIAL				OCU	MENT	NUMB	ER		DATE	NAME	CLASS	SUBCLASS	FILING D	
Fir	AA*	3	8	3	1	0	1	3	8/74	Alsup et al.				
40	AB*	3	8	3	8	3.	4	2	9/74	Bjorkman				
4/	AC*	3	9	0	0	7	2	1	8/75	Speiser et al.				
P	AD*	4	1	1	2	3	7	2	9/78	Holmes et al.			всил	ر
16	AE*	4	1	8	9	6	7	7	2/80	Cooper et al.			Bechrology	<u>8</u>
90	AF*	4	1	9	3	0	3	1	3/80 -	Cooper			/ Center	7
W	AG*	4	2	2	2	1	1	5	9/80	Cooper et al.			iter 2	2001
9	AH*	4	2	3	8	8	5	0	12/80	Vance			2600	
1	AI*	4	2	4	7	9	4	2	1/81	Hauer				
46	AJ*	4	2	8	5	0	6	0	8/81	Cobb et al.				
4	AK*	4	3	9	2	2	3	2	7/83	Andren et al.				
4	AL*	4	4	1	8	3	9	3	11/83	Zscheile, Jr.				

### FOREIGN PATENT DOCUMENTS

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AM*	2	2	2	9	6	0	9	9/90	Great Britain				
AN*	9	1	0	7	0	3	7		PCT				

### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AO*	Fluhr, Z.C. and Porter, P.T., "Advanced Mobile Phone Service: Control Architecture", The Bell system Technical Journal (Jan. 1979), Vol. 58, No. 1, pp. 43-69.

**EXAMINER** 

DATE CONSIDERED

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43	AP*	4	4	1	8	4	2	5	11/83	Fennel, Jr. et al.			
4	AQ*	4	4	2	5	6	4	2	1/84	Moses et al.			_
9	AR*	4	4	5	5	6	5	1	6/84	Baran			
4	AS*	4	4	7	9	2	2	6	10/84	Prabhu et al.			
90	AT*	4	4	8	4	3	3	5	11/84	Mosley et al.			<b></b>
76	AU*	4	5	1	2	0	1	3	4/85	Nash et al.			JUL 2 echnology
1	AV*	4	5	2	3	3	1	1	6/85	Lee et al.			IL 2
9/1	AW*	4	5	3	8	2	8	0	8/85	Mosley, Jr. et al.			
7	AX*	4	5	5	3	1	3	0	11/85	Kato			7 7001 Center 2500
4	AY*	4	5	6	3	7	7	4	1/86	Gloge			600
4	AZ*	4	6	0	6	0	3	9	8/96	Nicolas et al.			
U	BA*	4	6	1	2	6	3	7	9/86	Davis et al.			

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	BB*	8	6	0	0	4	8	6		PCT				
•	BC*	0	2	6	5	1	7	8	4/88	Europe				

### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

BD*	DeGaudenzi, R. and Viola, R., "A Novel Code Division Multiple Access System for High Capacity Mobile Communications Satellites", ESA Journal (1989), Vol. 13, pp. 303-322.
BE*	Stiffler, J.J., Theory of Synchronous Communications (Prentice-Hall, Inc., New Jersey), table of contents listing.

**EXAMINER** 

DATE CONSIDERED

# RECEIVED

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Ø	BF*	4	6	2	1	3	6	5	11/86	Chiu				
It.	BG*	4	6	3	9	9	1	4	1/87	Winters				
U	BH*	4	6	4	1	3	2	2	2/87 -	Hasegawa		i :		
48	Bl*	4	6	4	7	8	6	3	3/87	Skudera, Jr. et al.				
4	BJ*	4	6	4	9	5	4	9	3/87	Halpern et al.			echnology	
4	BK*	4	6	5	3	0	6	9	3/87	Roeder			nolog	7
4	BL*	4	6	6	0	1	6	4	4/87	Leibowitz			у Се	2 7
El	BM*	4	6	7	2	6	0	5	6/87	Hustig et al.			Center 2600	20 <b>d1</b>
1	BN*	4	6	7	2	6	2	9	6/87	Beier			260(	
a	BO*	4	6	7	2	6	5	8	6/87	Kavehrad et al.				
4	BP*	4	6	7	5	8	3	9	6/87	Kerr				
	BQ*	4	6	8	0	7	8	5	7/87	Akiyama et al.				

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BR*	9	1	1	5	0	7	1	10/91	PCT				
BS*	0	3	9	2	0	79	A2	10/90	EPO				

### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

BT*	Scholtz, Robert A., "The Origins of Spread-Spectrum Communications", IEEE Transactions on Communications (May 1982), Vol. Com. 30, No. 5; pp. 822-855.
BU*	Nettleton, Raymond W., Spectral Efficiency in Cellular Land-Mobile Communications: A Spread-Spectrum Approach (1978) (unpublished Ph.D. Dissertation, Purdue University.

**EXAMINER** 

DATE CONSIDERED





### **FORM PTO-1449**

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

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4	BV*	4	6	9	1	3	2	6	9/87	Tsuchiya				
91	BW*	4	6	9	7	2	6	0	9/87	Grauel et al.				
91	BX*	4	7	0	3	4	7	4	10/87	Foschini et al.				
4	BY*	4	7	0	7	8	3	9	11/87	Andren et al.				
4	BZ*	4	7	1	8	0	8	0	1/88	Serrano et al.			Te	
4	CA*	4	7	3	0	3	4	0	3/88	Frazier, Jr.			Fechnology Center 2600	_ے
	CB*	4	7	4	2	5	1	2	5/88	Akashi et al.			logy	7 2
1	CC*	4	7	5	5	9	8	3	7/88	Masak et al.			Cen	7
4	CD*	4	7	5	9	0	3	4	7/88	Nagazumi			er 2	2001
90	CE*	4	7	7	5	9	9	5	10/88	Chapman et al.			000	
1	CF*	4	7	8	9	9	8	3	12/88	Acampora et al.				
W.	CG*	4	7	9	9	2	5	3	1/89	Stern et al.				
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	CH*		C	Coop	oer,	Geo	orge			on, Ray, W., "Cellular Mob E Spectrum, June 1983, p			he Gr	eat
	CI*			Bla	asba	alg, I	Ⅎ., "	A C	omparison	of Pseudo-Noise and Con	ventiona	l Modula	tion fo	or

DATE CONSIDERED **EXAMINER** 

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Multiple-Access Satellite Communications," IBM Journal of Research Development, Vol. 9, No. 4, Jul. 1965, pp. 241-255.

Salmas; et al., "On the System Design Aspects of Code Division Multiple Access (CDMA) Applied to Digital Cellular and Personal Communication Networks" IEEE Vehicle Technology Conference, 19-22 May 1991, pages 57-62

### CEIVED

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EXAMINER INITIAL			D	OCU	MENT	NUMB	ER		DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
1	CK*	4	8	0	5	2	0	8	2/89	Schwartz			
91	CL*	4	8	0	7	2	2	2	2/89	Amitay			
	CM*	4	8	1	1	4	2	1	3/89	Havel et al.			
4	CN*	4	8	3	7	8	0	2	6/89	Higashiyama et al.			=
91	CO*	4	8	4	3	6	1	2	6/89	Brusch et al.			Technology
4	CP*	4	8	5	0	0	3	6	7/89	Smith			ology
W	CQ*	4	8	6	0	3	0	7	8/89	Nakayama			
W	CR*	4	8	6	6	7	3	2	9/89	Carey et al.			7 2001 Center 2600
	CS*	4	8	9	4	8	4	2	1/90	Broekhoven et al.			600
B	CT*	4	8	9	9	3	6	4	2/90	Akazawa et al.			
16	CU*	4	9	0	1	3	0	7	2/90	Gilhousen et al.			
1/2	-CV*	4	9	1	4	6	5	1	4/90	Lusignan			<u> </u>

### FOREIGN PATENT DOCUMENTS

							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION		
ļ	D	OCU	MENT	NUMB	ER						YES	NO	

### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

CW*	Dixon, Robert C., Spread Spectrum Systems (John Wiley & Sons, Inc.: New York, 3d ed. 1994), pp. 412-413.
CX*	The International Dictionary of Physics and Electronics (D. Van Nostrand Co.: Princeton, NJ, 2d ed. 1961), pp. 612, 952.

**EXAMINER** 

DATE CONSIDERED

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9/	CY*	4	9	2	2	5	0	6	5/90	McCallister et al.			
7	CZ*	4	9	3	0	1	4	0	5/90	Cripps et al.			
Q/	DA*	4	9	3	2	0	3	7	6/90	Simpson et al.			
Th	DB*	4	9	5	8	3	5	9	9/90	Kato			
4	DC*	4	9	6	9	1	5	9	11/90	Belcher et al.			Tech
9/	DD*	4	9	7	7	5	7	7	12/90	Arthur et al.			nolog
7	DE*	4	9	7	7	5	7	8	12/90	lshigaki et al.			nology Center
W	DF*	4	9	9	1	1	6	4	2/91	Casiraghi et al.			2001 nter 20
C	DG*	4	9	9	3	0	2	1	2/91	Nannicini et al.			)1 2600
16.	DH*	5	0	0	5	1	6	9	4/91	Bronder et al.			
96	DI*	5	0	1	6	2	5	5	5/91	Dixon et al.			
	DJ*	5	0	1	6	2	5	6	5/91	Stewart			

### FOREIGN PATENT DOCUMENTS

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		DATE	COUNTRY	CLASS	SUBCLASS	YES	NO	

### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

DK*	Robinson, Vester, Solid-State Circuit Analysis (Reston Publishing Co.: Reston, VA, 1975), pp. 309-314.
,	
DL*	Alavi, Hossein, Power Control and Interference Management in a Spread-Spectrum Cellular Mobile Radio System (1984) (Unpublished Ph.D. Dissertation, Michigan State University).

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B	DM*	5	0	2	2	0	4	7	6/91	Dixon et al.				
7	DN*	5	0	2	3	8	8	7	6/91	Takeuchi et al.				
4	DO*	5	0	2	9	1	8	1	7/91	Endo et al.				
41	DP*	5	0	4	0	2	3	8	8/91	Comroe et al.				7
4	DQ*	5	0	4	8	0	5	2	9/91	Hamatsu et al.				م مار
96	DR*	5	0	5	6	1	0	9	10/91	Gilhousen et al.			, vyy	<u></u> Г
91	DS*	5	0	7	3	9	0	0	12/91	Mallinckrodt			Cell	}
1	DT*	5	0	8	6	5	0	8	2/92	Furuno			er 2	100
2	DU*	5	0	9	3	8	4	0	- 3/92	Schilling			000	
Y	DV*	5	1	0	1	5	0	1	3/92	Gilhousen et al.				
4	DW*	5	1	0	3	4	5	9	4/92	Gilhousen et al.				
7	DX*	5	1	0	9	3	9	0	4/92	Gilhousen et al.				
U	DY*	5	1	2	9	0	9	8	7/92	McGirr et al.				
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### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

DZ*	M.B. Pursley, "Performance Evaluation for Phase-Coded Spread-Spectrum Multiple-Access Communication - Part I: System Analysis", IEEE Transactions on Communications, Com-25, No. 8, August, 1997.
EA*	J.M. Holtzman, "A Simple, Accurate Method To Calculate Spread-Spectrum Multiple-Access Error Probabilities", IEEE Transactions on Communications, Vol. 40, No. 3, March 1992.

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9	EB*	5	2	5	7	2	8	3	10/93	Gilhousen et al.				
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9	ED*	5	2	6	7	2	6	2	11/93	Wheatley III			Te	
95	EF*	5	2	9	9	2	2	6	3/94	Schilling			echndlogy Center 2600	ال
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9	EH*	5	3	8	6	5	8	8	1/95	Yasuda			Cent	7 7
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	EJ*			Orm	ond	royo	l, R.	F.,	"Power Con	trol for Spread-Spectrum and Systems, 20-22, Ap	Systems	," Confe	rence	on
		_	_	. '	Con	ımu	nica	uon	s Equipmen	it and Systems, 20-22, Ap	11111902,	рр. 103-	110.	
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	EK*		F	Proc	una: eedi	ay & ngs	Sec	ction	s, "Jaguar- n A-B, Vol. 1	V Frequency-Hopping Rac 29 (1982), June, No. 3, Pa Great Britain	art F, Ol	d Woking	g, Suri	ey,
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	EL*	Γ							IS95, Section	on 7.1.3.1.7 and Fig. 7.1.3	.1.7-2			
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